Mentored High School Summer Research Program

Grant Award Details

Mentored High School Summer Research Program

Grant Type: SPARK

Grant Number: EDUC3-13101

Project Objective: This SPARK program provides 8-week summer research internships for high school students in stem cell and regenerative medicine laboratories at Cedars-Sinai. Students, who will be recruited from diverse cultural and socio-economic backgrounds, will receive mentoring, attend lab meetings, lectures and journal clubs, participate in workshops and seminars, and participate in patient engagement activities. At the conclusion of their eight week internships, students will present their research in a culminating SPARK conference.

Investigator:

Name:	Wafa Tawackoli
Institution:	Cedars-Sinai Medical Center
Type:	PI

Award Value: $508,750

Status: Pre-Active

Grant Application Details

Application Title: Mentored High School Summer Research Program

Public Abstract: The CIRM SPARK program will be an intensive research experience for ten local high school students. This summer research training will be a prodigious addition to our existing high school outreach program, which has a track record of over 5 years of success in educating students from diverse cultural and socio-economic backgrounds, including classroom lectures, hosting field trips and an existing one-week summer research program. As a part of the SPARK program, the summer interns will receive an eight-weeks of hypothesis-based mentored research in one of the fifteen labs in our institute, all focused on the use of stem cells for translational studies in regenerative medicine, with the hopes of accelerating delivery of stem cell-based therapies to patients with unmet needs. In addition to their research projects, students will receive a comprehensive research education. Students will spend at least one day learning about the inner workings of organizing/ running a clinical trial and shadowing physicians/nurses in an ALS clinic to interact with patients. During their eight weeks they will also visit various core facilities (comparative medicine, imaging, biomanufacturing center) to learn more about the research process and will receive lectures from faculties. The students will be expected to attend their host labs' weekly journal clubs and lab meetings. They will also meet weekly in a group course to learn about different career paths in science and medicine, scientific reading, writing and presentations. Lastly, the students will attend a speaker series geared towards research interns and present posters of their summer research at Research Intern Day, both organized by our Institution. Here the students will get to know other summer interns and present their data. Our vision is that the students involved in this summer research internship will learn the power of regenerative medicine and gain experience that will propel them forward to a successful scientific career. Additionally, through the use of social media, we hope that reports of this research also inform the citizens of California of the uses of stem cells for regenerative medicine and inspires other young people to become involved in research.

Statement of Benefit to California: This research program will benefit the State of California and its citizens by 1) introducing high school students from diverse cultural and socio-economic backgrounds to the exciting world of regenerative medicine, 2) training them to become the next generation of scientists and 3) providing administrative and student community outreach via social media to inform all California citizens of the potential of stem cells and regenerative medicine. First, both our existing SPARK program and high school outreach program have a track record of over 5 and 10 years, respectively, of success in educating students from diverse cultural and socio-economic backgrounds. We plan to continue with the SPARK summer program to recruit local high school students for summer internships from diverse backgrounds. Second, these summer internships will then be used to train 10 local high school students to inspire them to become part of the next generation of research scientists with a particular interest in the potential of regenerative medicine. Lastly, through posting updates and blogs on CIRM's website, our institution's website and through other social media outlets such as Instagram and Facebook, this program will be a platform to educate the public of California at large about the use of stem cells for translational research and novel therapies for regenerative medicine.
